



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,629	01/23/2006	Fred Runge	20811/0204480-US0	2308
95402	7590	07/14/2010	EXAMINER	
LEYDIG, VOIT AND MAYER			HUYNH, NAM TRUNG	
TWO PRUDENTIAL PLAZA, SUITE 4900				
180 NORTH STETSON AVENUE			ART UNIT	PAPER NUMBER
CHICAGO, IL 60601			2617	
			MAIL DATE	DELIVERY MODE
			07/14/2010	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/565,629	RUNGE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	NAM HUYNH	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 15 June 2010.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 50-53,55-71,89 and 90 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 50-53,55-71,89 and 90 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____.	6) <input type="checkbox"/> Other: _____ .

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

### ***Allowable Subject Matter***

2. The indicated allowability of claims 50-53 and 55-90 are withdrawn in view of the newly discovered reference(s) to Lee et al. (US 7,307,958). Rejections based on the newly cited reference(s) follow.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 50-53, 55-71, 89, and 90 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee et al. (US 7,307,958).

Regarding claim 50, Lee teaches a method for carrying out a hands-free communication comprising:

establishing a respective connection from each of a plurality of telecommunication terminals (handsets) to a service server (BSC/MSC/gateway) over at least one communication network (figures 1A-1C and 2; handsets are connected to either a BSC, MSC, or gateway);

loading, at least temporarily, at least one program (software-defined vocoder) from the service server into at least one of the plurality of telecommunication terminals, the at least one program being configured to implement a speech processing algorithm (column 3, lines 47-59; vocoder is downloaded for storage in the handset at least temporarily for encoding and decoding voice signals);

implementing, in the at least one of the plurality of telecommunication terminals, the at least one program for use at least for a duration of a communication connection to process a speech signal (column 3, lines 60-67; column 4, lines 1-5; vocoder is used for at least the duration of the call); and

transmitting the processed speech signal over the at least one communication network (column 3, lines 50-53; vocoder encodes and decodes voice signals to be sent).

Regarding claim 51, Lee teaches the method as recited in claim 50 wherein the plurality of telecommunication terminals are mobile telecommunication terminals (figures 1A-1C and 2).

Regarding claim 52, Lee teaches the method as recited in claim 50 wherein the speech processing algorithm includes at least one of a hands-free, an echo cancellation, a speaker verification, a speaker recognition, a speaker classification, a

voice verification, a voice recognition, a text-to-speech and a noise reduction algorithm (column 3, lines 47-59).

Regarding claim 53, Lee teaches the method as recited in claim 50 further comprising establishing, over the at least one communication network, a connection between the at least one of the plurality of telecommunication terminal terminals and a server-based speech recognition system (column 3, lines 47-59; connection is established to download vocoder).

Regarding claim 55, Lee teaches the method as recited in claim 50 wherein the connection between the service server and the at least one of the plurality of telecommunication terminals is established via an interposed server-based speech recognition system (figures 1A-1C and 2, BSC, MSC, and gateway can literally recognize speech for conducting communications).

Regarding claim 56, Lee teaches the method as recited in claim 50 wherein the connection is established between the service server and the at least one of the plurality of telecommunication terminals in response to an automatic or user-defined request signal (call initiation by calling party) by the at least one of the plurality of telecommunication terminals (column 3, lines 47-59).

Regarding claim 57, Lee teaches the method as recited in claim 50 wherein the connection is established between the service server and the at least one of the plurality of telecommunication terminals in response to a request signal (notification of a call from calling party's network) of a server-based speech recognition system (column 3, lines 60-65).

Regarding claim 58, Lee teaches the method as recited in claim 50 wherein the connection is established between the service server and the at least one of the plurality of telecommunication terminals using respectively assigned identifiers (identifiers are used for establishing calls made in wireless networks) (column 3, lines 60-65).

Regarding claim 59, Lee teaches the method as recited in claim 58 wherein the respectively assigned identifiers include at least one of a CLI, an ANI and an HLR (typical GSM networks comprise a HLR) (figure 1B).

Regarding claim 60, Lee teaches the method as recited in claim 50 further comprising transmitting further signals during the communication connection (notification of calling party's network) (column 3, lines 60-65).

Regarding claim 61, Lee teaches the method as recited in claim 60 wherein the further signals include at least one of test signals, compensation signals, charging signals, identification parameters (calling party's network), and vector signals (column 3, lines 60-65).

Regarding claim 62, Lee teaches the method as recited in claim 50 further comprising selecting the speech processing algorithm using at least one of a speech recognition system, and the service server, the at least one of the plurality of telecommunication terminals (network of called party selects vocoder) (column 3, lines 47-67; column 4, lines 1-5).

Regarding claim 63, Lee teaches the method as recited in claim 50 further comprising loading the at least one program again during the communication connection (column 3, lines 47-67; column 4, lines 1-5).

Regarding claim 64, Lee teaches the method as recited in claim 50 further comprising:

updating the at least one program (the vocoder is updated as the handset moves between different networks); and

loading, at least temporarily, the updated at least one program into the at least one of the plurality of telecommunication terminals during the communication connection (vocoder is loaded when a call is received) (column 3, lines 47-67; column 4, lines 1-5).

Regarding claim 65, Lee teaches the method as recited in claim 50 further comprising transmitting, by the at least one of the plurality of telecommunication terminals, at least one of a specific identification parameter (notification of calling party's network) and a charging parameter for further processing by a device associated with at least one of a speech recognition system and the service server (received by called party's network) (column 3, lines 60-65).

Regarding claim 66, Lee teaches the method as recited in claim 50 further comprising calibrating, by the at least one of the plurality of telecommunication terminals, at least one of an A/D conversion and a D/A conversion (DSP) (figure 3, item 302).

Regarding claim 67, Lee teaches the method as recited in claim 66 wherein the calibrating is performed at least one of once during the communication connection, continuously, and digitally (figure 3, item 302; DSP processes voice signals during a call).

Regarding claim 68, Lee teaches the method as recited in claim 66 wherein the calibrating is performed using a compensation signal, the compensation signal being at least one of the speech signal and a test signal (figure 3, item 302; DSP processes voice signals during a call).

Regarding claim 69, Lee teaches the method as recited in claim 67 further comprising performing a procedure for locating a speech source (figure 3, item 302; DSP processes voice signals during a call).

Regarding claim 70, Lee teaches the method as recited in claim 69 wherein the performing the procedure for locating the speech source is performed for a multi-channel processing of at least two microphone signals (two spoken words during a call) (figure 3, item 310).

Regarding claim 71, Lee teaches the method as recited in claim 69 wherein the performing the procedure for locating the speech source is performed so as to achieve a noise reduction (DSPs are known in the art to reduce noise for enhancing speech) (figure 3, item 310).

Regarding claim 89, Lee teaches the method as recited in claim 62 wherein the speech processing algorithm is selected in response to identification parameters (called party network) associated with the telecommunication terminal (column 3, lines 47-67; column 4, lines 1-5).

Regarding claim 90, Lee teaches the method as recited in claim 62 wherein the speech processing algorithm is selected in response to a current environment (current

network) associated with the telecommunication terminal (column 3, lines 47-67; column 4, lines 1-5).

***Response to Arguments***

5. Applicant's arguments with respect to claims 50-53, 55-71, 89, and 90 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NAM HUYNH whose telephone number is (571)272-5970. The examiner can normally be reached on 8 a.m.-5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/  
Supervisory Patent Examiner, Art Unit 2617

/Nam Huynh/  
Examiner, Art Unit 2617